

## CHAPTER 5

### SPLIT PEAS

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U.S. DEPARTMENT OF AGRICULTURE  
Grain Inspection, Packers and Stockyards  
Administration  
Federal Grain Inspection Service

PEA AND LENTIL HANDBOOK  
Chapter 5  
Split Peas  
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## CHAPTER 5

### SPLIT PEAS

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Attachment - Grades and Grade Requirements for Split Peas

## 5.1 DEFINITIONS

*Split Peas.* Dry threshed seeds of the garden pea plant (*Pisum sativum* L.) and the winter field pea plant (*Pisum sativum* var *arvense* (L.) Poir.) of which 50 percent or more have been split into halves or smaller pieces and which contain not more than 10.0 percent of foreign material.

## 5.2 GRADES AND GRADE REQUIREMENTS

The grades and grade requirements for all classes of split peas are shown in the United States Standards for Split Peas (section 868.507) and in the attachment, "Grades and Grade Requirements for Split Peas," to this chapter.

## 5.3 SPECIAL GRADE AND SPECIAL GRADE REQUIREMENTS

- a. The special grade and special grade requirements of all classes of split peas are shown in the United States Standards for Split Peas (section 868.509).
- b. The special grade "Split Pea Chips" shall be applied in accordance with the following requirements. The split peas shall readily pass through a 12/64-inch round-hole sieve. Additional size requirements for the respective numerical grades shall be as follows:

U.S. No. 1      Not more than 3.0 percent shall readily pass through a 6/64-inch round-hole sieve.

U.S. No. 2      Not more than 6.0 percent shall readily pass through a 6/64-inch round-hole sieve.

U.S. No. 3      Not more than 10.0 percent shall readily pass through a 6/64-inch round-hole sieve.

## **5.4 WORK RECORD**

Record the results of all tests and findings clearly and accurately on a laboratory ticket or similar form. This will be used as the source of the information reported on the inspection certificate. FGIS personnel shall use either form FGIS-981, "Pea and Lentil Laboratory Ticket," or form FGIS-982, "Pea and Lentil Sample Ticket." Cooperators shall use a similar form.

**NOTE:** For submitted sample inspections, results may be recorded on form FGIS-994, "Commodity Certificate - Submitted Sample Inspection," or similar form.

## **5.5 REPRESENTATIVE PORTION**

A specified quantity of split peas divided out from the representative sample by means of an FGIS approved device.

## **5.6 WORK SAMPLE**

A representative portion of split peas (approximate size - 1,000 grams) that is used to make all such determinations required for a particular class of split peas.

## **5.7 FILE SAMPLE**

- a. A representative portion of split peas (approximate size - 1,000 grams) that may be used in conjunction with the work sample, when needed, to determine the complete grade. File samples may also be used for monitoring, retest, and appeal inspection purposes.
- b. Retain file samples in appropriate containers for the required retention period. After maintaining for the required period, dispose of the file samples in accordance with established procedures. See FGIS Directive 9170.13, "Uniform File Sample Retention System," for additional information.

## 5.8 PERCENTAGES

- a. Percentages are determined upon the basis of weight and are rounded as follows:
  - (1) When the figure to be rounded is followed by a figure greater than or equal to 5, round to the next higher figure; e.g., report 6.36 as 6.4, 0.35 as 0.4, and 2.45 as 2.5.
  - (2) When the figure to be rounded is followed by a figure less than 5, retain the figure; e.g., report 8.34 as 8.3, and 1.22 as 1.2.
- b. Record all results to the nearest tenth percent.

## 5.9 LABORATORY SCALES

Weigh samples and portions of samples using the proper class of FGIS approved laboratory scales, and record the results to the correct division size. Use the table below to determine the scale class and division size required for weighing particular sized samples.

<u>Table 1 - Laboratory Scales</u>			
Position Size	Scale Class	Maximum Division Size	Record Results to at Least the Nearest-
120 grams or less	Precision	0.01 gram	0.01 gram
Samples for moisture determinations	Precision or Moisture	0.1 gram	0.1 gram
More than 120 grams	Precision, Moisture, or General	1 gram	1 gram
NOTE: See Chapter 2 of the Equipment Handbook for additional information.			

## **5.10 PRELIMINARY EXAMINATION**

- a. The sampler must: (1) observe the uniformity of the split peas as to class, quality, and condition; (2) make the determination for "Heating;" (3) draw the representative sample; and (4) report relevant information to the inspector.
- b. The inspector must review the sampler's remarks/information. If the inspector has questions or doubts the representativeness of the sample, he or she must contact the sampler for the information, or make arrangements to obtain another sample.

## **5.11 BASIS OF DETERMINATION**

*All factor determinations shall be made upon the basis of the split peas as sampled.*

*Defects in split peas shall be scored in accordance with the order shown in section 868.501(e). Once an individual pea is scored in a defective category, it shall not be scored for any other defect but it shall remain as a part of the sample for purposes of determining percentages of other defects in the sample.*

**NOTE 1:** When split peas that are offered for inspection as one lot are found to contain more than 10,000 containers or 1,000,000 pounds (bulk) of split peas, the lot must be sampled on the basis of two or more (approximately) equal-sized sublots of 10,000 containers or 1,000,000 pounds or less. Inspect each subplot separately.

**NOTE 2:** When split peas that are offered for inspection as one lot are subsequently found to contain portions that are distinctly different in class, quality, or condition, the split peas in each portion shall be inspected separately.

Follow a systematic grading procedure. The order of procedure varies with the class and quality of the split peas and the tests that are required to determine the grade. A general order of procedure is as follows:

- (1) Review the information on the sample ticket.
- (2) Examine the representative sample for odor, color, broken glass, metal fragments, and distinctly low quality.

- (3) Use an FGIS approved divider to process the representative sample into three representative portions: (a) a work sample, (b) a file sample, and (c) a moisture portion.

**NOTE:** For specific information on the operation and maintenance of dividers, see Chapter 7 of the Equipment Handbook.

- (4) Examine the work sample for class and infestation.
- (5) Divide out a 250-gram portion and sieve the portion to determine the percent of split peas that pass through 6/64-inch, 8/64-inch, and 10/64-inch round-hole sieves or to determine if the split peas meet the size requirements for "chips."
- (6) Recombine the 250-gram portion and examine it for defective split peas and foreign material.

## 5.12 INSECT INFESTATION

**NOTE:** "Weevils" shall include pea weevils, coffee bean weevils, broad nosed grain weevils, rice weevils, granary weevils, maize weevils, and lesser grain borers. "Other live insects" shall include beetles, moths, meal worms, and other insects injurious to stored peas. Insect larvae shall be considered the same as adult insects.

- a. Determine infestation on the basis of the work sample as a whole, a representative portion of approximately 250 grams, and the lot as a whole.
  - (1) Perform a cursory examination of the work sample. If two or more live insects are found, consider the split peas to be "U.S. Sample grade."
  - (2) Closely examine a representative portion of approximately 250 grams divided out from the work sample.

- (a) If no live insects are found in the sample, make no further check of the sample for insects.
- (b) If two or more live insects are found, consider the peas to be "U.S. Sample grade."
- (c) If one insect is found, examine the remainder of the work sample.
  - 1 If one or more insects are found in the remainder of the work sample, consider the peas to be "U.S. Sample grade."
  - 2 If no insects are found in the remainder of the work sample, do not consider the peas to be "U.S. Sample grade."

**NOTE:**      **The presence of two or more split peas containing insect webbing or filth (refuse, excreta, or dead insects or larvae) in the representative sample as a whole, shall be considered sufficient evidence of insect infestation. But, the presence of pea weevils in a warehouse should not be considered an indication of infestation unless live or dead pea weevils are found inside bags or containers of peas.**

- (3) Examine the split peas in the lot; i.e., the surface area of the lot and the area around the lot.
  - (a) If no live insects are found in, on, or about the lot, make no further check of the lot for insects.
  - (b) If two or more live insects are found, consider the split peas to be "U.S. Sample grade."
- b. When applicable, show "U.S. Sample grade on account of (live insects or insect webbing and filth)@ on the work record and in the Remarks@ section of the certificate, and grade the split peas "U.S. Sample grade."

### 5.13 MOISTURE

*Moisture. Moisture content shall be determined by the use of equipment and procedures set forth in the Equipment Handbook or by any other method which gives equivalent results.*



- a. Determine moisture on a representative portion of exactly 250 grams.

- b. Refer to Chapter 5 of the Moisture Handbook for information about determining moisture using the Motomco Moisture Meter.

**NOTE:**      **If a representative portion of the original sample of split peas was not placed in a moisture-proof container at the time of sampling, promptly do so upon arrival at the laboratory. Seal the container with a friction or screw-top lid to preserve the loss of moisture. The use of open containers, paper containers, and similar containers for holding moisture samples is prohibited.**

- c. Record the percent of moisture on the work record to the nearest tenth percent. If the moisture results exceed 15.0 percent, grade the split peas "U.S. Sample grade."

## **5.14 CLASS**

*Split peas shall be divided into the following classes:*

*Green Split Peas.* *Split peas from the garden varieties which have green-colored cotyledons.*

*Yellow Split Peas.* *Split peas from the garden varieties which have yellow-colored cotyledons.*

*Winter Split Peas.* *Split peas from the Austrian Winter or Romack varieties, or of other similar varieties.*

**NOTE:**      **There is no class of "Mixed Split Peas."**

- a. Class is usually determined by a cursory examination of the work sample as a whole.
- b. When a detailed examination is necessary, make this determination on a representative portion of approximately 250 grams.

- c. When Green or Yellow Split peas contain in excess of the 1.5 percent of "contrasting split peas," and when Winter Split peas contain in excess of 2.0 percent of "contrasting split peas," grade the split peas "U.S. Sample grade."

## 5.15 ODOR

- a. Determine odor on the basis of the lot as a whole or the representative sample as a whole.
  - (1) Off-odors (i.e., musty, sour, and commercially objectionable odors) are usually detected at the time of sampling.
    - (a) If there is any question as to the odor when the sample is being taken, put part of the sample into an airtight container to preserve its condition for further examination in the laboratory.
    - (b) Return the portion to the sample before other tests are made.
  - (2) A musty odor shall be any odor that is earthy, moldy, and ground-like. Do not confuse a burlap bag odor with a musty odor.
  - (3) A sour odor shall be any odor that is rancid, sharp, or acrid.
  - (4) A commercially objectionable odor shall be any odor that is not normal to split peas and that, because of its presence, renders the split peas unfit for normal commercial usage; e.g., animal hides, fertilizer, oil products, skunk, smoke, fire-burnt, and decaying animal and vegetable matter odors.
  - (5) Fumigant or insecticide odors are considered commercially objectionable odors if they linger and do not dissipate. When a sample of split peas contains a fumigant or insecticide odor that prohibits a determination as to whether any other odor(s) exists, apply the following guidelines:
    - (a) Original Inspections. Allow the work portion to aerate in an open container for a period not to exceed 4 hours.

- (b) Appeal and Board Appeal Inspections. Allow unworked file samples and new samples to aerate in an open container for a period not to exceed 4 hours. The 4-hour aeration requirement does not apply when the original work portion was aerated and retained as the final file.

- (c) Final Action. Consider the sample as having a commercially objectionable odor if the fumigant or insecticide odor persists based on the above criteria.
- b. When split peas are determined to be musty, sour, or have a commercially objectionable odor, record the type of odor on the work record and in the **ARemarks@** section of the certificate, and grade the split peas "U.S. Sample grade."

## **5.16 HEATING**

- a. Determine heating on the basis of the lot as a whole.
  - (1) When high temperatures develop in split peas as the result of excessive respiration, such split peas are heating.
  - (2) Heating split peas usually give off a sour or musty odor.
  - (3) Care should be taken never to confuse split peas that are warm due to storage in bins, cars, or other containers during hot weather with split peas that are heating from excessive respiration.
- b. When applicable, show the term "Heating" on the work record and in the **ARemarks@** section of the certificate, and grade the split peas "U.S. Sample grade."

## **5.17 DEFECTIVE SPLIT PEAS**

*Defective Split Peas. The categories of defective split peas shall be weevil-damaged split peas, heat-damaged split peas, damaged split peas, contrasting split peas, whole peas, white caps, and bleached split peas.*

- a. Determine defective peas on a representative portion of approximately 250 grams.

- b. Score defects in the following order: Weevil-damaged, heat-damaged, damaged, contrasting split peas, whole peas (score weevil-damaged, heat-damaged, or damaged whole peas as "weevil-damaged," "heat-damaged," or "damaged," not as "whole peas"), white caps, and bleached split peas.
  - (1) Once an individual split pea is scored, do not score it for any other defect but retain it as part of the sample for purposes of determining the percentage of other defects in the sample.
  - (2) Record the percent of each type of defect on the work record and the certificate to the nearest tenth percent.

## **5.18 WEEVIL-DAMAGED SPLIT PEAS**

*Weevil-Damaged Split Peas. Split peas (including whole peas in split peas) which are distinctly damaged by the pea weevil or other insects.*

- a. Determine weevil-damaged split peas on a representative portion of approximately 250 grams.
- b. Usually, weevil-damaged split peas may be determined by visually examining the flat side of the cotyledon.
  - (1) The cavity left by the weevil larvae in the whole pea results in a cup-like indentation on the split pea. When this is found, consider the split peas to be weevil-damaged.
  - (2) Often, the pea weevil larvae dies before penetrating the center of the whole pea, leaving a black or discolored sting mark on the convex side of the cotyledon. When this sting mark is definite and shows distinct evidence of larvae penetration, consider the split pea to be weevil-damaged. (See ILS - S. Peas 1.61.)
- c. Record the percent of weevil-damaged split peas on the work record and the certificate to the nearest tenth percent.

## **5.19 HEAT-DAMAGED SPLIT PEAS**

*Heat-Damaged Split Peas.* *Split peas which have been materially discolored and damaged by heat.*

- a. Determine heat-damaged peas on a representative portion of approximately 250 grams.
- b. Consider split peas that have been discolored equal to or greater than that shown on ILS - S. Peas 1.2 to be heat damaged.
- c. Record the percent of heat-damaged peas on the work record and the certificate to the nearest tenth percent.

## **5.20 DAMAGED SPLIT PEAS**

*Damaged Split Peas. Split peas which are distinctly damaged by frost, weather, disease, heat (other than to a material extent), or other causes (except weevil or material heat damage), or are distinctly soiled or stained by nightshade, dirt, or toxic material.*

- a. Determine damaged split peas on a representative portion of approximately 250 grams.
- b. The major types of damaged split peas are as follows:
  - (1) Stained Damaged Split Peas. Split peas made from the winter varieties of peas frequently show discolored or stained split peas, especially on the flat side. Split peas and pieces of split peas with stains on the cotyledon equal to or greater than that shown on ILS - S. Peas 4.0 and 4.1.
  - (2) Frost Damaged Split Peas. Split peas and pieces of split peas which have been damaged by frost to the extent that the cotyledon has been discolored.
  - (3) Mold Damaged Split Peas. Split peas and pieces of split peas which contain mold equal to or greater than that shown on ILS - S. Peas 1.4. Mold may appear on or around the hilum, the surface, and/or the cotyledon. A pea that contains any mold on the cotyledon shall be considered damaged.



- (4) Chalky Split Peas. Split peas that have a white spot on the surface of the cotyledon caused by unusual weather conditions, some harvesting practices, and/or Lygus bug stings. (Do not scrap the cotyledon of suspect split peas, merely remove their seedcoats.) Chalky split peas are considered damaged split peas, not weevil-damaged split peas. (See ILS - Peas/S. Peas 1.0.)
  - (5) Damaged by Heat Split Peas. Split peas and pieces of split peas that have been damaged by heat to the extent that the cotyledon has been discolored equal to or greater than that shown on ILS - S. Peas 1.3.
- c. Record the percent of damaged peas on the work record and the certificate to the nearest tenth percent.

## 5.21 CONTRASTING SPLIT PEAS

*Contrasting Split Peas. Split peas which are of a color contrasting with the predominating class of split peas. Bleached Split peas of the predominating class shall not be considered as contrasting split peas.*

- a. Determine contrasting split peas on a representative portion of approximately 250 grams.
- b. Green Split peas are made from the class Smooth Green Dry peas.
  - (1) The color of the cotyledon runs from pale green to dark green.
  - (2) Contrasting split peas in Green Split peas must be split peas which have a solid orange-yellow or creamy yellow color.
- c. Yellow Split peas are made from the class Smooth Yellow Dry peas.
  - (1) They have a brilliant orange-yellow color.
  - (2) Contrasting split peas in Yellow Split peas must be split peas which have a solid green color associated with the color of the cotyledons of the Smooth Green

Dry peas, or as in the case of Winter Dry peas, a smaller yellow cotyledon having pieces of black or grayish green colored seedcoat clinging to it.

**NOTE:**      **Yellow Split peas often contain split peas which have green blotches on the Yellow Split peas or they may be almost entirely green with tinges of yellow coloring. These are considered as Bleached Yellow Split peas (if they meet the line for bleach) and should not be considered as contrasting split peas in Yellow Split peas.**

- d.      Winter Split peas are made from the class Winter Dry peas.
  - (1)      Winter Split peas are considerably smaller than Yellow Split peas and have a more creamy colored cotyledon. Often, they have pieces of a brownish black or grayish green colored seedcoat clinging to the cotyledon.
  - (2)      Contrasting split peas in Winter Split peas must be split peas which have a solid green color associated with the color of the cotyledons of the Smooth Green Dry peas, or as in the case of Yellow Split peas, a large yellow cotyledon.
- e.      Record the percent of contrasting split peas on the work record and the certificate to the nearest tenth percent.

## **5.22    WHOLE PEAS**

Whole Peas.    *Dry peas which are not split.*

**NOTE:**      **Score defective whole peas as "whole peas" unless they are weevil-damaged. Score weevil-damaged whole peas as "weevil-damaged split peas" and include in the total percent of weevil-damaged split peas.**

- a.      Determine whole peas on a representative portion of approximately 250 grams.
- b.      A "whole pea" is any pea which is more than one-half of a whole dry pea. Seedcoatless unsplit peas shall be considered to be "whole peas."
- c.      Record the percent of whole peas on the work record and the certificate to the nearest tenth percent.

## **5.23    WHITE CAPS**

White Caps. *Split peas with the seedcoat attached.*

- a. Determine white caps on a representative portion of approximately 250 grams.
- b. During the process of splitting whole dry peas, the seedcoat is removed. For various reasons, part of the seedcoat sometimes adheres very tightly to the cotyledon causing "white caps." White caps are readily distinguishable as they show up well in any class of split peas.
- c. Seedcoats come in a number of colors; e.g., white, tan, green, brown, black, purple, or mottled. Consider split peas with seedcoats attached to be white caps regardless of the color of the seedcoat.
- d. Record the percent of white caps on the work record and the certificate to the nearest tenth percent.

#### **5.24 BLEACHED SPLIT PEAS**

Bleached Split Peas. *Split peas of green-colored varieties which are bleached distinctly yellow in color or split peas of yellow-colored varieties which are bleached distinctly green in color.*

**NOTE: Bleached Split peas is not a grading factor in Winter Split peas.**

- a. Determine Bleached Split peas on a representative portion of approximately 250 grams.
- b. Bleached Split peas in Green Split peas are those split peas which are white or light creamy yellow in color as contrasted with the natural color of Green Split peas. (See ILS - S. Peas 2.0.)
- c. Bleached Split peas in Yellow Split peas are often those split peas that have green blotches or those that are almost entirely green with tinges of yellow coloring. (See ILS - S. Peas 2.1.)
- d. Bleached Split peas must be distinctly bleached with at least one-eighth of the surface distinctly yellow or green in color, as the case may be, in contrast to the good natural color which is characteristic of the class being graded.

- e. Record the percent of Bleached Split peas on the work record and the certificate to the nearest tenth percent.

## 5.25 FOREIGN MATERIAL

*Foreign Material.* All matter which will pass readily through a 2-**2**/64 round-hole sieve and all matter other than split peas and whole peas which remains on the sieve. (Foreign material shall include detached seedcoats and pieces of detached seedcoats.)

- a. Determine foreign material on a representative portion of approximately 250 grams.

- (1) Nest a 2-**2**/64-inch round-hole sieve on top of a bottom pan.
- (2) Place the sieve in a mechanical grain sizer and set the timer to 20.
- (3) Put the representative portion in the center of the sieve and actuate the sizer.

**NOTE:** If a mechanical sizer is unavailable, hold the sieves and bottom pan level and, using a steady motion, move the sieves from right to left approximately 10 inches, and return from left to right to complete one sieving operation. Repeat this operation twenty times.

- (4) Return the peas remaining in the perforations of the sieve to the portion that remains on top of the sieve.
  - (5) Remove any material, other than split peas, remaining in the portion on top of the sieve, including detached seedcoats. Place this material with the portion that passed through the sieve and consider all of this portion as foreign material.
- b. Record the percent of foreign material on the work record and on the certificate to the nearest tenth percent.

## 5.26 SIZE REQUIREMENTS

*THE U.S. STANDARDS FOR SPLIT PEAS CONTAIN GRADE LIMITS FOR THE PERCENT OF SPLIT PEAS THAT MAY PASS THROUGH 10/64-INCH, 8/64-INCH, AND 6/64-INCH ROUND-HOLE SIEVES.*

*Split Pea Chips. The split peas shall readily pass through a 12/64-inch round-hole sieve. Additional size requirements of the respective numerical grades shall be as follows:*

*U.S. No. 1      Not more than 3.0 percent shall readily pass through a 6/64-inch round-hole sieve.*

*U.S. No. 2      Not more than 6.0 percent shall readily pass through a 6/64-inch round-hole sieve.*

*U.S. No. 3      Not more than 10.0 percent shall readily pass through a 6/64-inch round-hole sieve.*

- a. Determine uniformity of size and/or the special grade "Chips" on a representative portion of approximately 250 grams.
  - b. Size split peas as follows:
    - (1) Nest the appropriate size sieves on top of a bottom pan.
    - (2) Place the sieves in a mechanical grain sizer and set the timer to 20.
    - (3) Put one-third of the representative portion in the center of the sieve and actuate the sizer.
- NOTE:**      **If a mechanical sizer is unavailable, hold the sieves and bottom pan level and, using a steady motion, move the sieves from right to left approximately 10 inches, and return from left to right to complete one sieving operation. Repeat this operation twenty times.**
- (4) Return the peas remaining in the perforations of the sieve to the portion that remains on top of the sieve.
  - (5) Determine the percent of peas that pass through each of the sieves.

- c. When determining uniformity of size, record the percent of peas that pass through the sieves and the size of sieves used in the determination on the work record and on the certificate to the nearest tenth percent.

- d. When determining the special grade "Chips," if all of the peas pass through a 12/64-inch round-hole sieve, show the special grade "Chips" on the work record and on the grade line of the certificate; and also record the percent of peas that pass through the 6/64-inch round-hole sieve on the work record and on the certificate to the nearest tenth percent.

## **5.27 COLOR**

*Good Color Split Peas.* Split peas that in mass are practically free from discoloration and have the natural color and appearance characteristics of the predominating class.

*Fair Color Split Peas.* Split peas that in mass are off-color from the characteristic color of the predominating class as a result of age or any other cause.

*Poor Color Split Peas.* Split peas that in mass are distinctly off-color from the characteristic color of the predominating class as a result of age or any other cause.

- a. Determine color on the representative sample as a whole.
- b. Record the color as "good," "fair," or "poor" on the work record and in the **Remarks** section of the certificate.

## **5.28 BROKEN GLASS**

- a. Determine broken glass on the basis of the lot as a whole and/or the representative sample as a whole.
- b. The presence of any broken glass (regardless of the size or amount) in the lot as a whole, work sample, or sample as a whole, shall be sufficient evidence of broken glass.
- c. When applicable, show the term "Broken glass" on the work record and in the **Remarks** section of the certificate, and grade the split peas "U.S. Sample grade."



## 5.29 METAL FRAGMENTS

- a. Determine metal fragments, such as metal filings or metal shavings, on the basis of the lot as a whole and/or the sample as a whole.
- b. Sufficient evidence of metal fragments shall be:
  - (1) Two or more metal fragments in the lot as a whole or the work sample; or
  - (2) One metal fragment in the work sample and one or more in the file sample.
- c. When applicable, show the term "Metal fragments" on the work record and in the **ARemarks@** section of the certificate, and grade the split peas "U.S. Sample grade."

## 5.30 DISTINCTLY LOW QUALITY

*Distinctly Low Quality.* Whole dry peas which are obviously of inferior quality because they are stained by an unknown foreign substance or because they otherwise contain a known toxic substance(s) or an unknown foreign substance(s) or because they are in an unusual state or condition, and which cannot be graded by use of the other grading factors provided in the standards.

- a. Determine distinctly low quality on the basis of the lot as a whole or the representative sample as a whole.
  - b. Split peas that are obviously affected by unusual conditions which adversely affect the quality of the peas, such as animal excreta or other filth, unknown foreign substance, or treatment with a fungicide, shall be considered to be "distinctly low quality."
  - c. When applicable, show the statement "Distinctly low quality on account of (cause or reason)."
- on the work record and in the **ARemarks@** section of the certificate and grade the split peas "U.S. Sample grade."

### 5.31 INTERPRETIVE LINE SLIDES

The interpretive line slides (ILS) system assists inspectors in making subjective grading decisions. This system consists of a portable tabletop transparency viewer and photographic slide transparencies. The viewer uses a precisely controlled light source of low intensity designed to provide a standard picture and to protect the slide. Therefore, only use the special viewer for ILS. Other light sources, such as a regular slide projector, may provide a distorted picture and damage the ILS. Use of such a projector is not prohibited; but, once used in this manner, the slides may not be used for official purposes.

Table 3  
Currently Available Interpretive Line Slides

PEAS/S.PEAS-1.0	DAMAGE - CHALK SPOT
PEAS-1.1	DAMAGE - DIRT/GRIME
PEAS/S.PEAS-1.2	DAMAGE - HEAT
PEAS/S.PEAS-1.3	DAMAGED-BY-HEAT
PEAS-1.5	DAMAGE - SPROUT
PEAS-1.6	DAMAGE - WEEVIL
S.PEAS-1.61	DAMAGE - WEEVIL
PEAS-1.7	WEEVIL DAMAGE (Insect Stung)
PEAS-1.8	DAMAGE - FROST
PEAS/S.PEAS-2.0	BLEACHED - GREEN PEAS
PEAS/S.PEAS-2.1	BLEACHED - YELLOW PEAS
PEAS-3.0	CRACKED SEEDCOAT
S.PEAS-4.0	STAINED - GREEN
S.PEAS-4.1	STAINED - YELLOW
PEAS-5.0	SHRIVELED - SMOOTH
PEAS-5.1	NOT SHRIVELED
PEAS-5.2	SHRIVELED - WRINKLED
PEAS-5.3	BACTERIUM STAINED PEAS
PEAS-5.4	WEATHER DAMAGE

PAGE RESERVED



GRADES AND GRADE REQUIREMENTS FOR SPLIT PEAS

Grading Factors	Maximum percent limits of:		
	Grades U.S. Nos		
	1	2	3
Split Peas Passing Through -			
10/64-inch Round-Hole Sieve	3.0	15.0	25.0
8/64-inch Round-Hole Sieve	0.5	3.0	5.0
6/64-inch Round-Hole Sieve	0.1	0.2	0.3
Weevil-Damaged Split Peas	0.5	1.0	1.5
Heat-Damaged Split Peas	0.2	0.5	1.0
Damaged Split Peas <sup>1/</sup>	1.0	1.5	2.0
Contrasting Split Peas			
In Green & Yellow Split Peas Only	0.3	0.8	1.5
In Winter Split Peas Only	0.5	1.0	2.0
Whole Peas	0.5	1.0	2.0
White Caps			
In Green & Yellow Split Peas Only	1.0	2.0	3.0
In Winter Split Peas Only	1.5	3.0	5.0
Bleached Peas in Green & Yellow Split			
Peas Only	1.5	3.0	5.0
Foreign Material	0.1	0.2	0.5
Minimum Requirements for Color	Good	Fair	Poor
<p>U.S. Sample grade: U.S. Sample grade shall be split peas which:</p> <p>(a) Do not meet the requirements for the grades U.S. Nos. 1, 2, or 3; or</p> <p>(b) Contain more than 15.0 percent moisture; live weevils, other live insects, insect webbing or filth; metal fragments; broken glass; or a commercially objectionable odor; or</p> <p>(c) Are heating or are of distinctly low quality.</p> <p><sup>1/</sup> Damaged split peas do not include weevil-damaged or heat-damaged split peas.</p>			